

Work Order ID 61549

Monday, August 30, 2010 11:04:10 AM



Page 1

Item ID: D206-642-241

Accept



Setup Start



Revision ID:

Item Name: Replacement Skidtube

Stop



Start Date: 8/30/2010 Start Qty: 1.00



Cust Item ID:

Required Date: 9/6/2010 Req'd Qty: 1.00



Customer:

Reference:

Approvals:	Process Plan: <i>M</i>	Date: <i>10-8-30</i>	Tooling:	Date:	Run Start	
	QC: _____	Date: _____	SPC (Y/N):	Date: _____	Stop	

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D2650	Rev F

100



DOCUMENT CONTROL

DC

Document Control

Memo

0.00

Photocopy bluefile & type labels per PPP D206-642-241

CHG005

N/A *JJ*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Customer:

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Approvals: Process Plan: _____ Date: _____

Tooling: _____ Date: _____

Run

Start



QC: _____ Date: _____

SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center ID

110

Operation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Skidtubes

Skidtubes

Skidtubes

Memo

0.00

1-Deburr Fwd edge of tube

2- Remove ridge on inside of Fwd edge of tube as per Dwg D2650

3-Weld Fwd Cap as per Dwg D2650. Use aluminum rod. Grind D2647 to fit as required.

Pick:

Qty Part Number Description BatchA/R Aluminum Rod M112502 / M114877 BE-10-09-01

4-Grind weld flush to cap on top surface only.

5-Cut Aft end as per dwg 2650 from front of tube and Deburr ✓

6-Remove inner indexing ridge on Aft end of skidtube as per Dwg D2650

7-Open holes for Aft end cap as per Dwg D2650 with #30 Drill Bit using DT8025.

8-Drill pilot holes using Dt 8167.

9-Locate DT8732 from inner Aft saddle hole & 3rd crossbolt hole. Insert D3286-1 doubler using DT8732 & D206-642-241-T1, then locating doubler off of 3/16" holes, cleco DT8732 & doubler leaving DT8732 for added support.

10- Drill D3286-1 doubler rivet holes in tube using # 30 drill, spot drilling doubler at the same time.

SAD
10-09-01

SAD
10-09-02

D
10-9-14

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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NOTE: Date & initial all entries

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Work Order ID 61549

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Item ID: D206-642-241

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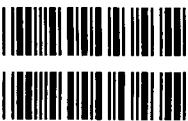
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Required Date: 9/6/2010 Req'd Qty: 1.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center ID

130



Skidtubes

Operation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

0.00

Skidtubes

* Re Do Re Batch #: cannot reas
0.00 S. w/ 1/4

Memo

1-Open crossbolt holes to Ø0.3125"

2-Drill pilot holes using DT8028-3, then open to Ø0.297" as per Dwg D2650.
Open Aft cap hole #6.

3-Deburr tube and blow out chips from inside the tube

0.00

140



HandFinish

Chemical Conversion Coat per QSI005 4.1

0.00

Memo

0.00

Hand Finishing

150



QC

QC3- Inspect Part Finish

0.00

Memo

0.00

Quality Control

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Cust Item ID:

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Customer:

Reference:

Approvals: Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run

Start



QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

Sequence ID/
Work Center ID

160



Skidtubes

Operation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

0.00

Skidtubes

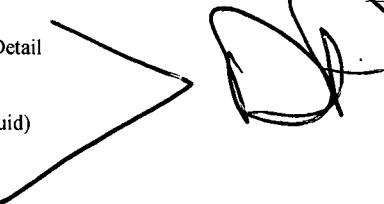
Memo

0.00

1-Open holes to finished size as per Dwg D2650, D2650-3 Drilling Detail
(without cutting fluid)

2-C'sink crossbolt spacer holes as per Dwg D2650 (without cutting fluid)

3-Deburr and blow out all chips from inside the tube



10-9-15

170



QC

Quality Control

QC6- Inspect dimensions to drawing

0.00

Memo

0.00

S. Colaris

(4)

W/O:		WORK ORDER CHANGES					
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Customer:

Reference:

Approvals: Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start



QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
180 	Skidtubes	0.00							

Skidtubes

Memo

0.00

1-Locate, install and rivet doublers as per Dwg D2650. Micro-shave rivets as required

2-Bond D2654-3 web in place as per QSI 015. Ensure holes line up. Allow 12 Hrs. cure time before cutting

Start Date: 10-9-15 Time: 3:45 pm
Finish Date: 10-9-16 Time: 8:10 pm

Pick:

Qty Part Number Description Batch
A/R Sikaflex-291 M115114
Sikaflex expire date: 11-1-30

190



QC5- Inspect part completeness to step on W/O

0.00

QC

Quality Control

Memo

0.00

Solaris

10-9-15

R

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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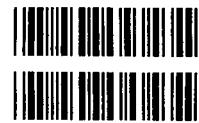
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Cust Item ID:

Required Date: 9/6/2010 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center ID
200Operation
Description
SkidtubesSet Up/
Run Hours
0.00

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Skidtubes

Memo

0.00

1-remove alodine from around hole and prepare for welding

2-Prep per QSI 005 and Insert D2649 crossbolt spacers. Weld as per QSI 004 and Dwg D2650. Remember to back drill each hole to 0.25" before welding the other side. Use aluminum rod.

Pick:

Qty Part Number Description Batch
A/R Aluminum Rod M12507

3-Grind welds flush as per Dwg D2650.

4-Using DT8733, insert (2) D3286-3 spacers as per QSI 004 and Dwg D2650. Remember to back drill each hole to Ø0.402" before welding other side. Use SS rod as required.

A/R SS Rod NONE

5-Counterbore 5/16" x 0.750" deep except 7th hole from Aft end as per Dwg D2650. Deburr

BE 10/09/16

BE 10/09/16

10/09/23

BE 10/09/23

BE 10/09/28

BE 10/09/28

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Customer:

Reference:

Approvals: Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start



QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

Sequence ID/
Work Center ID

210



HandFinish

Operation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

0.00

0.00

0.00

1 -

BB 10/09/28

Hand Finishing

HandFinishing
Memo
Install D2680-041 Nut Plate as per Dwg D2650

220



QC

Quality Control

QC9- Inspect visual per QSI004- Fusion Welds

0.00

QCS PD 10.09.29
QC10 10/09/29

230



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

0.00

8 10/09/29

(W)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

**Sequence ID/
Work Center ID**

240



HandFinish

Hand Finishing

**Operation
Description**

Pressure Wash per QSI005 4.3

Set Up/
Run Hours

0.00

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

=> 10/09/30 JU

1 0

250



Powdercoat

Powder Coating

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

M 115391

0.00

BL 10-10-4

③ ✓

Memo

0.00

START TIME:

8:45

OVEN TEMPERATURE:

320

FINISH TIME:

9:15

260



QC

Quality Control

QC3- Inspect Part Finish

0.00

=> JU 10/10/05

1 ✓

Memo

0.00

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Customer:

Reference:

Approvals: Process Plan: _____ Date: _____

Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____

SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center ID

270



HandFinish

Operation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

0.00

=2M 1010105

1 g _____

Hand Finishing

Memo

0.00

1- Install inserts & wearpads as per dwg D2922. Use a drop of Sikaflex inside insert holes before installing wearpad/wearplate.

A/R Sikaflex-291 M115114
 Sikaflex expire date: 11101

2-Install D2651-3 O-Rings on D2651-1 plugs with Petroleum Jelly and install plugs as per Dwg D2650 (D2650-3 detail). Clean excess adhesive.

3-Install MS27039-4-06 Screw as per DEO 9153.

4 -Install D2646 Aft Cap and seal with Sikaflex. Clean excess adhesive

A/R Sikaflex-291 M115114
 Sikaflex expire date: 11101

5 -Wing Walk as per Dwg D2650-3 and QSI 005 4.4

A/R Batch:
 Batch: M115028

300



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

S1010105

Memo

0.00

80 _____

W/O:		WORK ORDER CHANGES					
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Approvals: Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run

Start



QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

Sequence ID/
Work Center ID

310



Packaging

Packaging

Operation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

0.00

Packaging

Memo

0.00

Identify and pack for shipping as per PPP D206-664-241

Location: _____

PPP Rev: _____

615498 RL

320



QC

Quality Control

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

10/10/12 JJ

11/10/12 C

W/O:		WORK ORDER CHANGES					
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Picklist Print

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Page 1

Work Order ID: 61549



Parent Item: D206-642-241



Parent Item Name: Replacement Skidtube

Start Date: 8/30/2010

Required Date: 9/6/2010

Comments: IPP Rev: 04.12.02□Revised procedural steps□KJ/JLM IPP RevP: revise and update route/bom DD 10.01.06 verified by:EC□IPP rev Q 10.02.19 per PAR 09-043 EC verified by: DD

Start Qty: 1.00

Required Qty: 1.00

Start Qty: 1.00

Required Qty: 1.00

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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E								

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Picklist Print

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Parent Item: D206-642-241



Parent Item Name: Replacement Skidtube

Start Date: 8/30/2010

Required Date: 9/6/2010

Start Qty: 1.00

Required Qty: 1.00

CR3212-4-04



Purchased No

180 Each

463.0000

52

52



Cherry Rivet

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST311	463	
112314	63	
113644	200	
113749	200	

52 10-9-15

D2649



Manufactured No

200 Each

29.0000

18

18



Cross Bolt Spacer

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
LG	29	
58545	2	
60652	27	

B 61496 B 86 10/09/16

D3286-3



Manufactured No

200 Each

13.0000

2

2



Spacer

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
LG	13	
46643	13	

2 BE 10/09/16

D2680-041



Manufactured No

210 Each

35.0000

1

1



Nut Plate

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST021	35	
55366	35	

1 BE 10/09/16

W/O:		WORK ORDER CHANGES					
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Parent Item Name: Replacement Skidtube

Start Date: 8/30/2010

Required Date: 9/6/2010

Start Qty: 1.00

Required Qty: 1.00

CR3212-4-03

Purchased

No

210

Each

1,910.000

2

2



Cherry Rivet

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST311	1910	
111359	5	
112314	2	
114436	448	
114450	81	
114859	1374	

CCR264SS3-3

Purchased

No

210

Each

470.0000

2

2



Cherry Rivet

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST311	470	
112314	4	
113539	44	
113973	422	

D2646

Manufactured

No

270

Each

71.0000

1

1



Aft Cap

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP-4	62	
57332	62	
FP6	9	
52663	9	

2

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

W/O:		WORK ORDER CHANGES					
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Monday, August 30, 2010 11:04:16 AM

Page 4

Work Order ID: 61549



Parent Item: D206-642-241



Parent Item Name: Replacement Skidtube

Start Date: 8/30/2010

Required Date: 9/6/2010

Start Qty: 1.00

Required Qty: 1.00

D2651-1



Plug

Manufactured No

270

Each

734.0000

18

18



M 1010105

	<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
	FP	152	
	51530	152	
	fpa	582	
	53349	411	
	<u>57869</u>	171	X18

AN960JD416



NAS1149D0463J Purchased

No

270

Each

0.0000

1

1

M 1010105



X18 M 1010105

Washer

D2651-3



Manufactured No

270

Each

342.0000

18



M 1010105

O-Ring

	<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
	FP	342	
	<u>46114</u>	342	X18

MS27039-1-08



Purchased No

270

Each

1,685.000

46

46

M 1010105

Screw

	<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
	ST291	1685	
	<u>110835</u>	493	X2
	114718	192	
	115108	1000	

PTO
LAST PAGE!

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

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Page 5

Work Order ID: 61549



Parent Item: D206-642-241



Parent Item Name: Replacement Skidtube

Start Date: 8/30/2010

Required Date: 9/6/2010

Start Qty: 1.00

Required Qty: 1.00

ALS4-1032-130



Purchased

No

270

Each

3,094.000

44

44



M 1010105

Insert

	<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
PKG11	114723	2902	X44
ST282	110511	153	
	114407	10	
ST381	114654	143	
		39	
		39	

MS27039-4-06



Purchased

No

270

Each

118.0000

1



M 1010105

Screw

	<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST292	109061	118	X1
	115460	24	
		94	

AN960JD10L



NAS1149D03321 Purchased

No

270

Each

2,481.000

46



M 1010105

Washer

	<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST348	110985	2481	M114348
		2481	Y7

PTO ~~L1T Project~~

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

W/O: 61549

WORK ORDER CHANGES

DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
10/10/05	270	USE NAS 1149 C0332R / M115816 QTY (44) NAS 1149 DO 332 J / M115622 QTY (X2) DO 332 J	M	10/10/05	X44 X2	CP 10.10.05 QSI 042	S 10/10/05
10/10/05	270	USE MS27039 C1-08 / M115336 QTY (44) MS27039 -1-08 / M110835 QTY (X2)	M	10/10/05	X44 X2	CP 10.10.05 QSI 042	S 10/10/05

Part No: D206-642-241 PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

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Page 6

Work Order ID: 61549



Parent Item: D206-642-241



Parent Item Name: Replacement Skidtube

Start Date: 8/30/2010

Required Date: 9/6/2010

Start Qty: 1.00

Required Qty: 1.00

D3537-1



Wearpad

Manufactured No

270

Each

8.0000

4

4



M 10110105

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>	
FP	1		
55465	1		
FP017	48		
FP17	7		
57713	3	B61640	
60491	4		

D3537-3



Wearpad

Manufactured No

270

Each

9.0000

1



M 10110105

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>	
FP19	9		
59711	9	B60866	

D3535-13



Wearshoe

Manufactured No

270

Each

7.0000

1



M 10110105

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>	
FP018	7	B62006	
58686	7		

D3536-13



Gasket

Manufactured No

270

Each

10.0000

1



M 10110105

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>	
FP11	10		
58684	10	B61970	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

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Page 7

Work Order ID: 61549



Parent Item: D206-642-241



Parent Item Name: Replacement Skidtube

Start Date: 8/30/2010

Required Date: 9/6/2010

Start Qty: 1.00

Required Qty: 1.00

D3535-21



Manufactured No

270

Each

11.0000

1

1



YL 10110105

D3536-21



Manufactured No

55730

270

Each

4.0000

1



YL
1
YL 10110105

D3535-33



Manufactured No

47010

270

Each

1.0000

1



YL
1
YL 10110105

D3536-33



Manufactured No

51647

270

Each

12.0000

1



YL
1
YL 10110105

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP	1	
	1	

YL

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP	12	
	12	

YL

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

8 7 6 5 4 3 2 1

QTY -1	QTY -3	QTY -5	QTY -7	PART NUMBER	DESCRIPTION
X				D2650-1	SKIDTUBE ASSEMBLY
X				D2650-3	SKIDTUBE ASSEMBLY
X				D2650-5	SKIDTUBE ASSEMBLY
X				D2650-7	SKIDTUBE ASSEMBLY
1	1	1	1	D2600-1-160	EXTRUSION
1				D2654-1	WEB
1				D2654-3	WEB
1				D2654-5	WEB
			1	D2654-7	WEB
1	1	1	1	D2646	AFT CAP
1	1	1	1	D2647	CAP
17	18	19	23	D2649	CROSS BOLT SPACER
16	18	14	22	D2651-1	PLUG
16	18	14	22	D2651-3	O-RING
1	1	1	1	D2680-041	NUT PLATE
2	2			D3286-1	DOUBLER
2	2			D3286-3	STUD
42	44	54	60	ALS7-1032-130	INSERT (or AKS4-1032-130, ALS4-1032-130, ALS7-1032-130)
2	2	2	2	AN960JD10L	WASHER
2	2	2	2	CCR264SS3-3	RIVET
2	2	2	2	CR3212-4-03	RIVET
2	2	2	2	MS27039-1-08	SCREW
1	1	1	1	MS27039-4-06	SCREW
1	1	1	1	AN960JD416	WASHER
52	52			CR3212-4-04	RIVET

F

CD 10/9/02
W10-B61549RELEASED
08-23-10

F

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: -CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
-POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
-BLACK ANTI-SKID PAINT AS INDICATED TO 0.5 ABOVE LOCATION RIDGE PER DART QSI 005 4.4
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: N/A
- 8) WELD PER DART QSI 004
- 9) DAMAGE TOLERANCE ON FWD BEND:
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 5 INCHES ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP TO 0.020 DEEP IN THE BENT PORTION OF THE TUBE. A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE.
- 10) BOND WEB INTO OUTER TUBE WITH SIKAFLEX-241/-291 ADHESIVE PER DART QSI 015
- 11) INSERT D2651-1 PLUG C/W D2651-3 O-RING IN HOLES MARKED "P" (BOTH SIDES OF TUBE)
- 12) DRILL Ø.297 FOR ALS7-1032-130 INSERTS USING TEMPLATE DT8056-1 ON -1 TUBE, DT8056-3 ON -3 TUBE, DT8056-5 ON -5 TUBE, AND DT8056-7 ON -7 TUBE. INSTALL INSERTS AFTER FINISH.
- 13) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

F	DRAWING UPDATED TO CURRENT STANDARDS. SHT 6 ADDED. ALL SECTION AND DETAIL VIEWS TRANSFERRED TO SHT 6. SHT 1 IN PL PART D2649 QTY UPDATED. SHT 6 SECT C-C GRIND INSTRUCTIONS DELETED FROM NOTE 7 (SEE NCR 239).	AJS	08.08.08
E	RMOVE CBORE, CHG DRILL, ADD CHAMFER	CP	06.03.30
D	REDRAW: INCCRP. DE09136/9153/9163 MOD GROUND HANDLING ON D2650-1/-3	CP	04.05.17
C	CHANGE HOLE PATTERN AND FRONT END	DS	97.10.29
B	AS MANUFACTURED CHANGES	DS	97.06.26
A	NEW ISSUE	DS	97.03.25
REV.	DESCRIPTION	BY	DATE
DESIGN	DS	DART AEROSPACE USA, INC PORT HADLOCK, WA	
DRAWN	AJS		
CHECKED	A	DRAWING NO.	REV. F
MFG. APPR.	Z	D2650	SHEET 1 OF 6
APPROVED	Z	TITLE	SCALE
DE APPR.	H	206/407 SKIDTUBE ASSEMBLIES	NTS
DATE	08.08.08	COPYRIGHT © 1997 BY DART AEROSPACE USA, INC THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC	

8 7 6 5 4 3 2 1

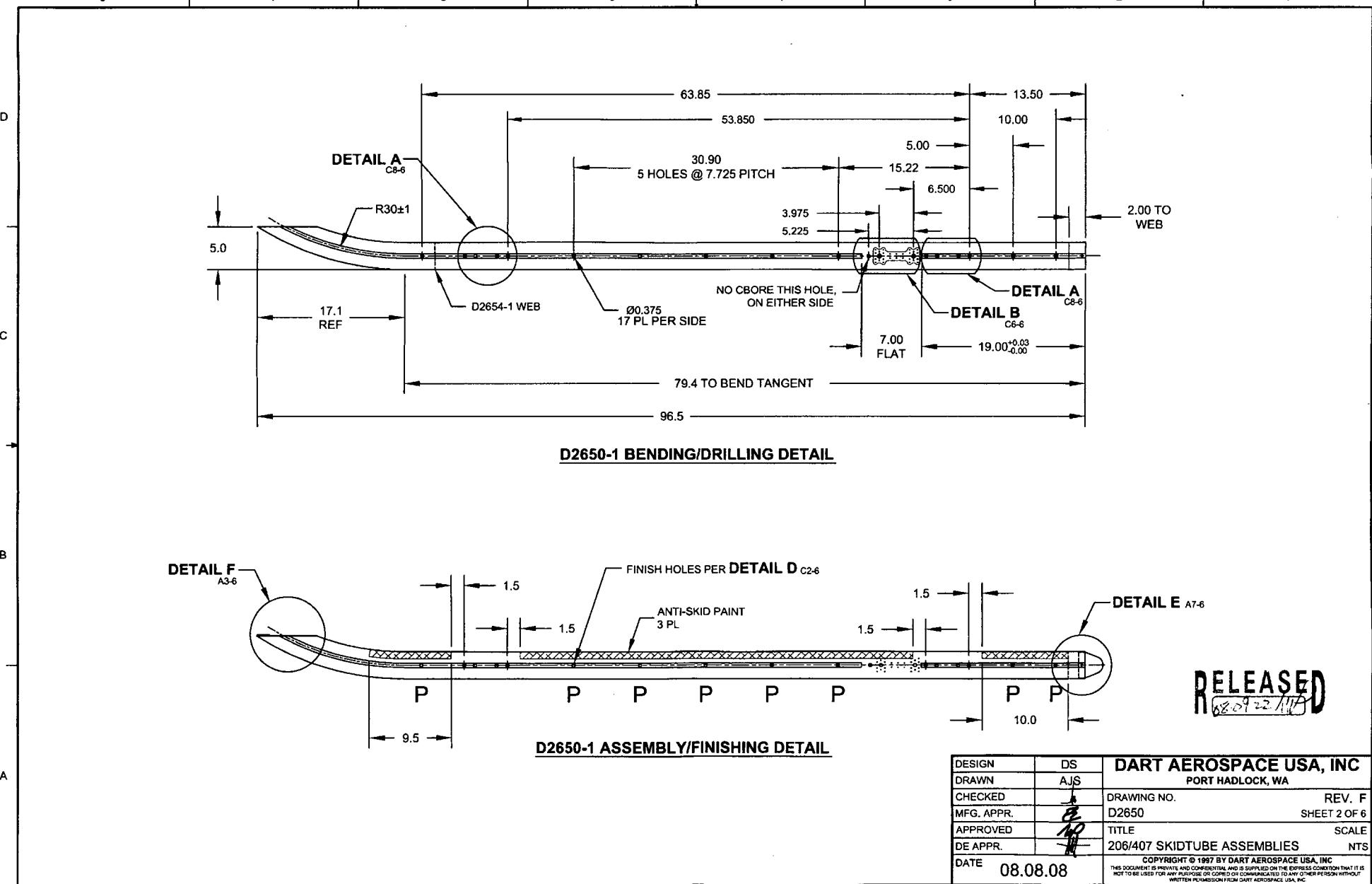
D

C

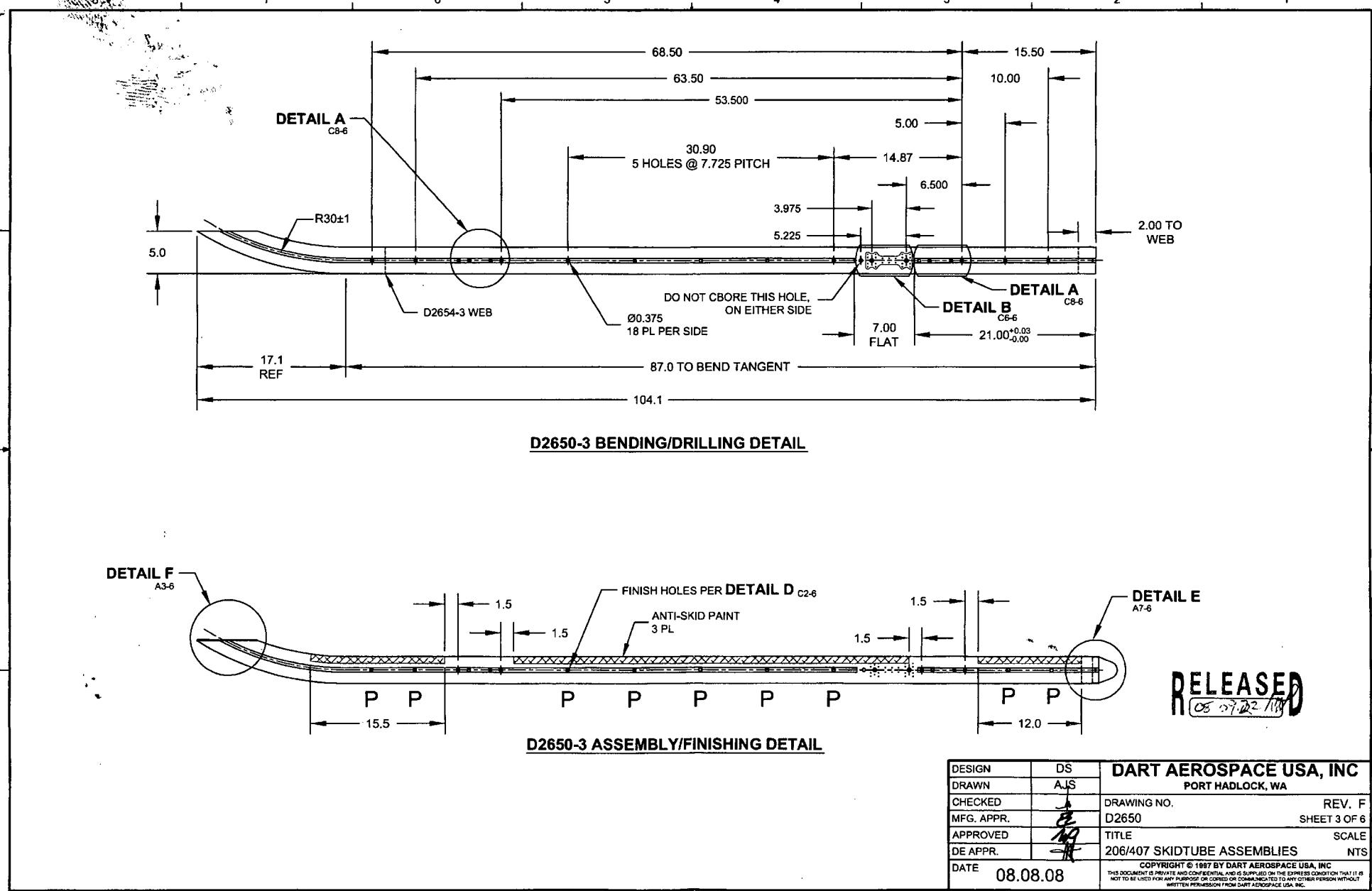
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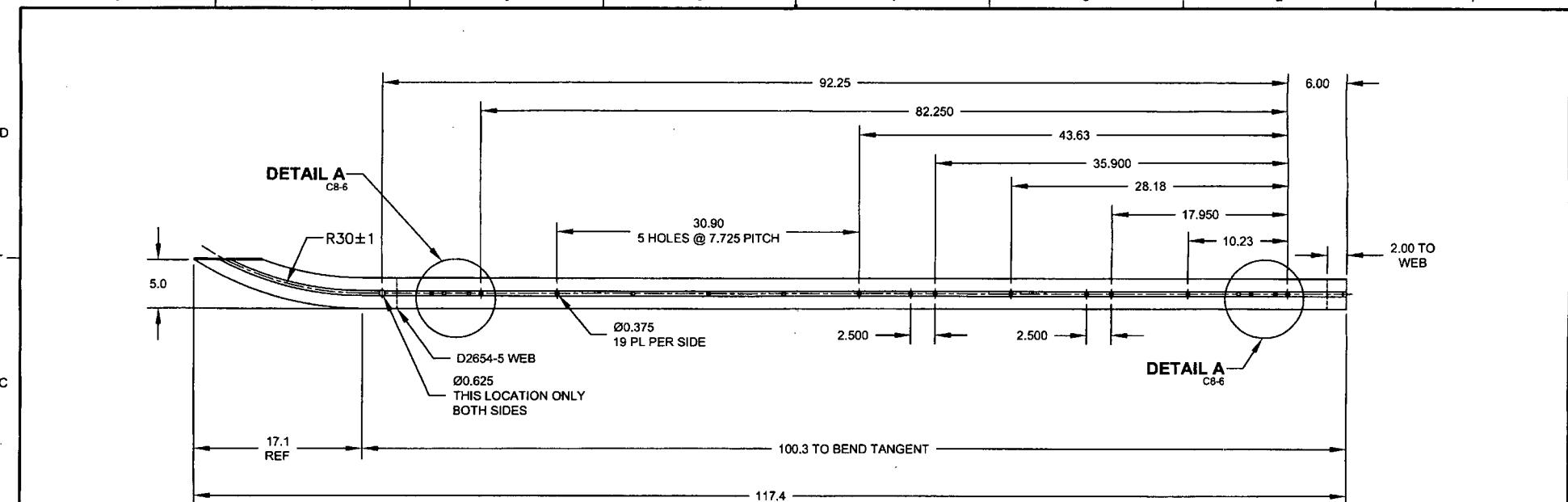
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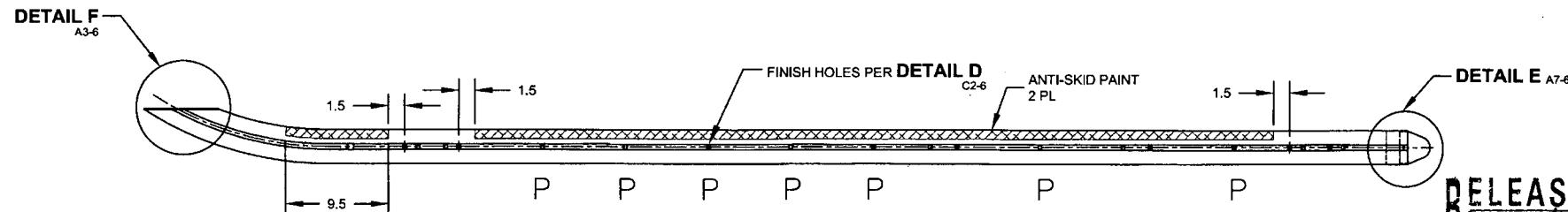
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8 7 6 5 4 3 2 1



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D2650-5 ASSEMBLY/FINISHING DETAIL

DESIGN	DS	DART AEROSPACE USA, INC	
DRAWN	A/S	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. F
MFG. APPR.		D2650	SHEET 4 OF 6
APPROVED		TITLE	SCALE
DE APPR.		206/407 SKIDTUBE ASSEMBLIES	NTS
DATE	08.08.08	COPYRIGHT © 1997 BY DART AEROSPACE USA, INC THIS DOCUMENT IS THE PROPERTY AND CONFIDENTIAL OF DART AEROSPACE USA, INC. IT IS PROHIBITED THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

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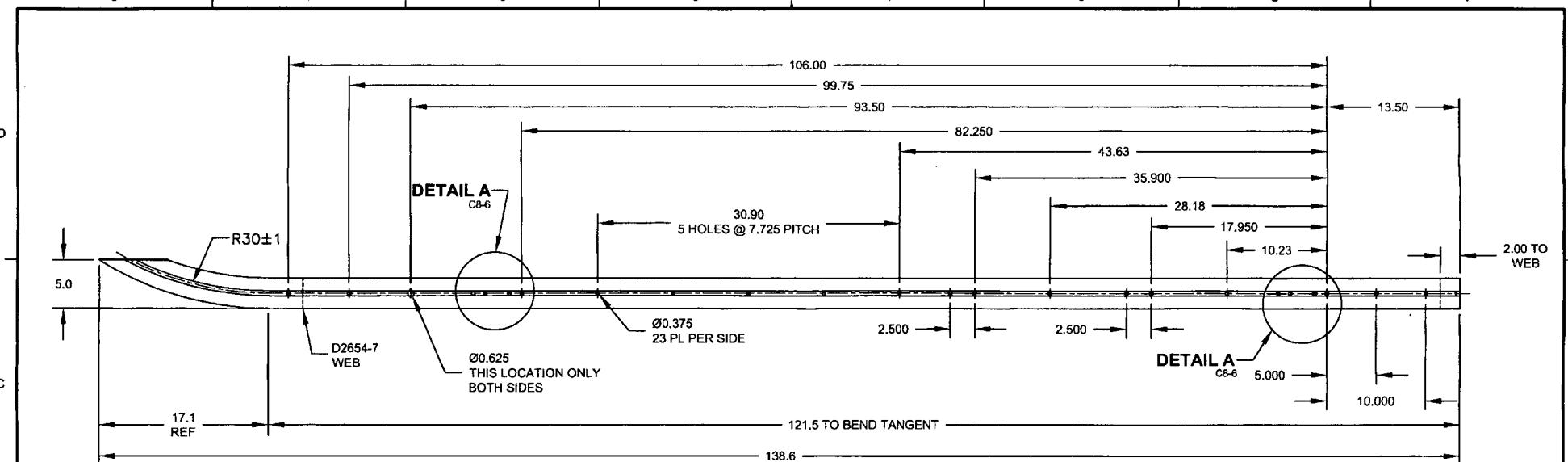
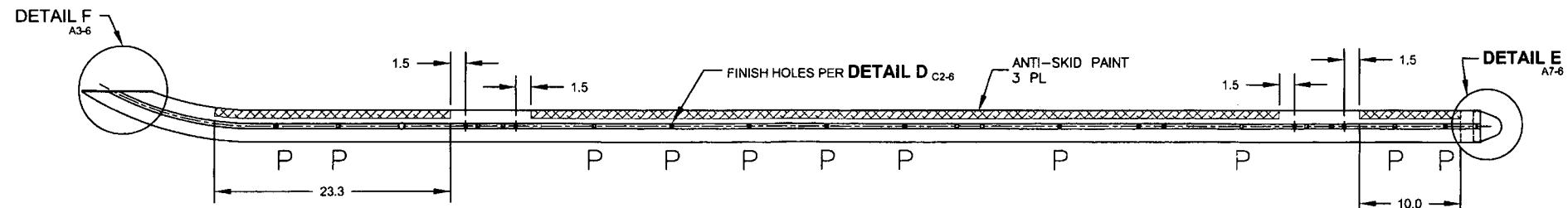
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4

3

2

1

**D2650-7 BENDING/DRILL DETAIL****RELEASED**
08-27-22 MTP**D2650-7 ASSEMBLY/FINISHING DETAIL**

DESIGN	DS	DART AEROSPACE USA, INC	
DRAWN	AJS	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	
MFG. APPR.		REV. F	
APPROVED		D2650 SHEET 5 OF 6	
DE APPR.		TITLE	SCALE
		206/407 SKIDTUBE ASSEMBLIES	NTS
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8

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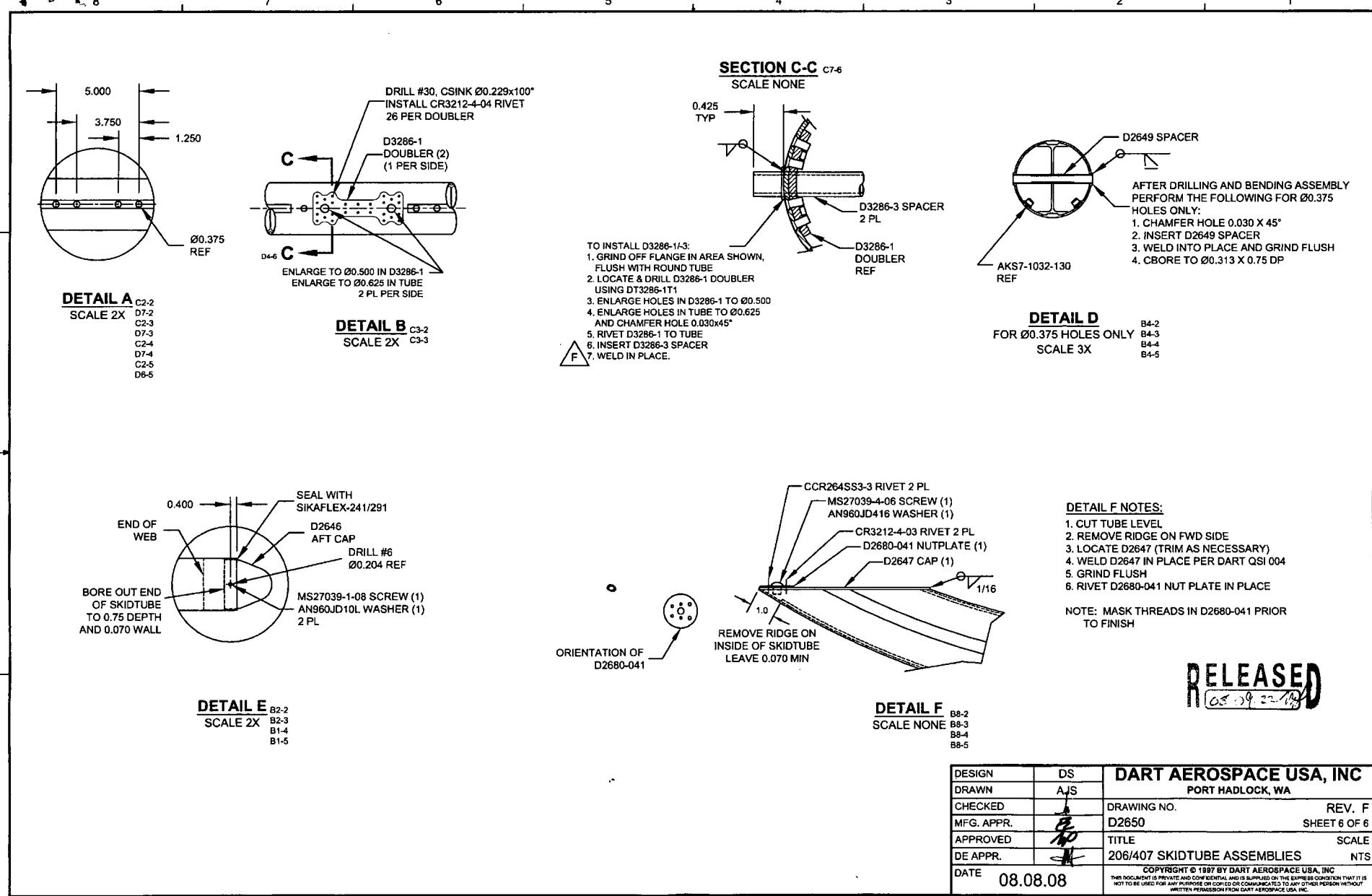
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1





NO. 251

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name: Borday Elliott
Job number: 61089
Part number: D206-642-441
Description: 206 skid tube
Welding Process: Tig[] Mig[]
Base materiel: Aluminium
Current: AC[] DC[]

TEST REQUIREMENTS AND RESULTS

Visual: pass[] fail[]
Penetration: pass[] fail[]

UNACCEPTABLE

Cracks: pass[] fail[]
Undercut: pass[] fail[]
Pin holes: pass[] fail[]
Overlap (cold lap) pass[] fail[]
Porosity (surface): pass[] fail[]
Coloration: pass[] fail[]

Qualifier R.D. Day Date of Test Coupon 10.08.19

Welder Borday Elliott Date of Test Coupon 10.08.19

The above named individual is qualified in accordance with AWS D17.1.2001 to weld